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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,908	01/29/2004	Iain F. McVey	MEDZ 2 01313	5315

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EXAMINER	
CONLEY, SEAN EVERETT	
ART UNIT	PAPER NUMBER
1744	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,908	MCVEY ET AL.	
	Examiner	Art Unit	
	Sean E. Conley	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *1-9,18 and 19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/29/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/16/05, 4/26/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed December 6, 2006 has been received and considered for examination. Claims 1-19 are pending with claims 1-9 and 18-19 being withdrawn from consideration for being directed to a non-elected invention.

Election/Restrictions

2. Applicant's election with traverse of group II, claims 10-17 in the reply filed on December 6, 2006 is acknowledged. The traversal is on the ground(s) that new apparatus claim 18 so closely parallels method claim 10 that the process of claim 10 cannot be performed by another or materially different apparatus and the apparatus of claim 18 cannot be used to practice another or materially different process than claim 10. Furthermore, the applicant attempts to compare various other method claims with apparatus claims by arguing that they also parallel each other. This is not found persuasive because the apparatus as claimed in group I, claims 1-9 and 18-19 can be used in a process of deodorizing buildings by using the means for circulating to dispense a deodorant vapor. The apparatus claims are not limited to any specific type of vapor that is to be circulated. Therefore, claims 1-9 and 18-19 are withdrawn from consideration for being directed to a nonelected invention.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 recites the limitation "the regions" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 10 and 11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 19, 25, and 30 of copending Application No. 10/940,495. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process limitations of present claims 10 and 11 are disclosed in claims 19, 25, and 30 of application 10/940,495. Specifically, claims 19, 25, and 30 disclose a method of circulatiing hydrogen peroxide vapor through HVAC ductwork and associated rooms.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 10 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 18, 20, and 25 of U.S. Patent No. 7,157,046 B2. Although the conflicting claims are not identical, they are not patentably

distinct from each other because claims 18, 20, and 25 disclose a method that includes the steps of circulating hydrogen peroxide vapor through HVAC ductwork and associated rooms which is what is claimed in claims 10 and 11 of the present application.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sias et al. (U.S. Patent Application publication No. US 2003/0035754 A1).

Regarding claim 10, Sias et al. disclose a method of decontaminating buildings comprising: circulating a vapor decontaminant through HVAC ductwork and associated rooms (see figure 8; see paragraphs [0026]-[0027], [0033], [0041]-[0042]).

Regarding claim 11, Sias et al. disclose that the vapor decontaminant includes hydrogen peroxide vapor (see paragraphs [0027]; [0032]-[0033]).

10. Claims 10, 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Adiga et al. (U.S. Patent Application Publication No. US 2004/0005240 A1) and claim 15 as is

rejected under 35 U.S.C. 102(e) as being anticipated by Adiga et al. (U.S. Patent Application Publication No. US 2004/0005240 A1) as evidenced by Gonzales et al. (US 2004/0084899 A1).

Regarding claim 10, Adiga et al. disclose a method of decontaminating buildings comprising: circulating a vapor decontaminant through HVAC ductwork and associated rooms (see paragraphs [0048]-[0052]).

Regarding claim 11, Adiga et al. disclose that the vapor decontaminant includes hydrogen peroxide mist which is a vapor (see paragraphs [0049]-[0051]).

Regarding claim 15, it is well known that HVAC ductwork contains numerous bends and changes in the direction of the ducts in order to deliver a flow of air to different parts of the room or different floors of a building. The method of Adiga et al. includes the step of creating turbulent flow in the ductwork because when the flow encounters an elbow in the ductwork turbulence is created (as evidenced by Gonzales et al. (US 2004/0084899 A1) - see paragraph [0004]).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adiga et al. as evidenced by Karamanos et al. (U.S. Patent Application Publication No. US 2003/0171092 A1).

Regarding claim 12, Adiga et al. discloses that the hydrogen peroxide vapor (mist) is circulated in the HVAC ducts as well as rooms of a building (see paragraphs [0048]-[0052]). It is well known that conventional HVAC systems contain numerous bends and changes in the direction of the ductwork in order to deliver a flow of air to

different parts of the room or different floors of a building. Additionally, HVAC systems recirculate air from the rooms through the return ducts and therefore, it is obvious that the hydrogen peroxide vapor (mist) in the method of Adiga et al. is circulated in one direction as it passes through the duct to the room and then in an opposite direction when it is returned from the room through the recirculating return duct (this recirculation is also evidenced by Karamanos et al. (U.S. Patent Application Publication No. US 2003/0171092 A1) – see figure 1). Furthermore, Adiga et al. emphasizes that the duration of treatment corresponds to the concentration of the hydrogen peroxide vapor (mist) and that the duration is either increased or decreased depending upon the treatment situation (see paragraphs [0049]-[0052]). Thus, it is obvious that the hydrogen peroxide vapor is left in the HVAC ductwork and associated rooms for a predetermined dwell time.

Regarding claim 16, Adiga et al. discloses that the hydrogen peroxide vapor (mist) may be generated and delivered through a transport pipe or tube (42) to a distant site without appreciable loss of mist throughput. Adiga et al. further discloses that this design provides the capability to generate the mist at a location (44) which may be a truck and then deliver it to the intended location or site (8) for sterilization via tube (42) and HVAC ductwork (46) (see figure 6; see paragraph [0048]). Again, it is well known that HVAC systems in buildings contain many HVAC subsystems. Therefore, it is obvious to one of ordinary skill in the art that the hydrogen peroxide vapor in the method of Adiga et al. first decontaminates any HVAC subsystems prior to decontaminating the room (8) of the building which is the contamination site.

13. Claims 13, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adiga et al. as applied to claim 10 above, and further in view of Karamanos et al. (U.S. Patent Application Publication No. US 2003/0171092 A1).

Adiga et al. is silent with regards to automatically opening and closing baffles at registers between the HVAC ductwork and the rooms in response to sensed conditions.

Karamanos et al. disclose a self-contained ventilation flow control system for a HVAC system, the flow control system comprising a plurality of flow control units (having electronically controlled baffles) and a master control unit (see figures 1-2; see entire document; especially paragraphs [0002], [0006], [0014], [0026]-[0027]. The system further includes a plurality of sensors including flow sensors and temperature sensors which are used to adjust the baffles in response to sensed conditions in the room or ductwork (see paragraphs [0026]-[0027], [0029]). This device is useful for isolating rooms of a building that are to be decontaminated (see paragraph [0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Adiga et al. and include the steps of installing temporary baffles in the ductwork, automatically control the opening and closing of baffles based on sensed conditions, and furthermore, isolate certain rooms that are to be decontaminated as taught by Karamanos et al. in order to control which rooms are to be decontaminated by hydrogen peroxide vapor (as well as isolate rooms that are safe) and also ensure that sufficient flow rates and temperatures have been achieved based on sensed conditions and controlling of the baffles.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Conley whose telephone number is 571-272-8414. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sec /SC/

March 1, 2007

GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER